UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/807,168	03/24/2004	Hiroaki Inoue	Q80602	6480

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EXAMINER
GUYTON, PHILIP A

ART UNIT	PAPER NUMBER
2113	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on *19 February 2008*.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) *1-35* is/are pending in the application.
    4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) *1-3 and 20-22* is/are rejected.
7) ☒ Claim(s) *4-19 and 23-35* is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.
    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
    a)☐ All   b)☐ Some * c)☐ None of:
      1.☐ Certified copies of the priority documents have been received.
      2.☐ Certified copies of the priority documents have been received in Application No. _____.
      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)
1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1.   A request for continued examination under 37 CFR 1.114, including the fee set

forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this

application is eligible for continued examination under 37 CFR 1.114, and the fee set

forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action

has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 19

February 2008 has been entered.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3.   Claims 1-3 and 20-22 are rejected under 35 U.S.C. 102(b) as being anticipated

by European Patent Publication EP 49521 A2 to Nakanishi et al. (hereinafter

Nakanishi).

        With respect to claim 1, Nakanishi discloses a parallel processing system for

operating an OS for single processors and an application on a plurality of processors

and achieving parallel processing by said plurality of processors with respect to said

application, comprising:

a parallel processing unit (figure 1, item 3001) which controls units of work which are parallel processable within said application on one processor of the plurality of processors as new units of work on another processor of the plurality of processors, which parallel processing unit belongs to one processor of said plurality of processors (page 3, lines 15-19): and

an inter-process communication unit (figure 1, items 303) which controls inter-process communication between processes executed on the plurality of processors (page 4, lines 19-24), which inter-process communication unit is functionally provided independently of said OS (figure 1, item 303 and page 12, line 27-page 13, line 5),

wherein said inter-process communication unit receives a system call request related to said inter-process communication issued from processes of said one processor or said another processor to said OS for single processors (page 5, lines 19-22 and page 6, line 28-page 7, line 7) and issues a request for process control to said OS for single processors of said one processor or said another processor by using a system call (page 7, lines 13-25 and page 9, line 23-page 10, line 14).

With respect to claim 2, Nakanishi discloses wherein said plurality of processors are logically divided into at least two groups of at least a first processor group and a second processor group (figure 1);

wherein, said parallel processing unit belonging to one processor of said first processor group sends a request for units of work that are parallel processable within said application on said first processor group to at least one processor of said second processor group (page 5, lines 19-25 and page 1, lines 1-5), and

wherein, said at least one processor of said second processor group controls the units of work as a new units of work based on said request (page 7, lines 13-25).

With respect to claim 3, Nakanishi wherein said inter-process communication unit is provided on a processor of said first processor group and on a processor of said second processor group (figure 1, items 303).

With respect to claim 20, Nakanishi discloses a parallel processing program stored on a computer-readable medium for achieving parallel processing by a plurality of processors with respect to an application on a parallel processing system for operating an OS for single processors and said application on said plurality of processor, comprising the functions of:

a parallel processing function of controlling units of work which are parallel processable within said application on one processor of the plurality of processors as new units of work on another processor of the plurality of processors (page 3, lines 15-19 and page 1, lines 1-5); and

an inter-process communication function of controlling inter-process communication between processes executed on the plurality of processors (page 4, lines 19-24), which inter-process communication function is functionally provided independently of said OS (figure 1, item 303 and page 12, line 27-page 13, line 5);

wherein said inter-process communication function includes

a function of receiving a system call request related to said inter-process communication issued from processes of said one processor or said another processor

to said OS for single processors (page 5, lines 19-22 and page 6, line 28-page 7, line 7); and

a function of issuing a request for process control to said OS for single processors of said one processor or said another processor by using system call (page 7, lines 13-25 and page 9, line 23-page 10, line 14).

With respect to claim 21, Nakanishi discloses wherein said plurality of processors are logically divided into at least two groups of at least a first processor group and a second processor group (figure 1);

wherein, said parallel processing unit belonging to one processor of said first processor group sends a request for units of work that are parallel processable within said application on said first processor group to at least one processor of said second processor group (page 5, lines 19-25 and page 1, lines 1-5), and

wherein, said at least one processor of said second processor group controls the units of work as a new units of work based on said request (page 7, lines 13-25).

With respect to claim 22, Nakanishi wherein said inter-process communication unit is provided on a processor of said first processor group and on a processor of said second processor group (figure 1, items 303).

Allowable Subject Matter

4.   Claims 4-19 and 23-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

5.   Applicant's arguments filed 19 February 2008 have been fully considered but

they are not persuasive. Applicant asserts that Nakanishi does not teach wherein the

inter-process communication unit is functionally provided independently of the OS, as

recited in the amended claims. More specifically, applicant states Nakanishi teaches

that communication between processes occurs within the OS. The examiner

respectfully disagrees. Nakanishi discloses wherein each job processor has an

interprocessor communication control section (figure 1, item 303). The interprocessor

communication control sections function to control communication with the input/output

units (page 4, lines 24-28). In one embodiment, the communication control section

communicates via external interruptions applied through the input/output processor

(page 12, line 27-page 13, line 5). Thus, the interprocessor communication control

section operates independently of the OS.

Conclusion

Any inquiry concerning this communication or earlier communications from the

examiner should be directed to PHILIP GUYTON whose telephone number is (571)

272-3807. The examiner can normally be reached on M-F 8:00-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Robert Beausoliel can be reached on (571) 272-3645. The fax phone

number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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5/1/08

/Robert W. Beausoliel, Jr./

Supervisory Patent Examiner, Art Unit 2113